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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,039	02/14/2006	Takashi Hirokawa	20241/0207052-US0	7330

7278 7590 04/30/2008

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EXAMINER	
CHUI, MEI PING	
ART UNIT	**PAPER NUMBER**
1616	
MAIL DATE	**DELIVERY MODE**
04/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/543,039	HIROKAWA ET AL.	
	Examiner	Art Unit	
	MEI-PING CHUI	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☒ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/31/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Action

Receipt of Amendments/Remarks filed on 01/17/2008 is acknowledged. Claims 1, 3-8 and 11 have been amended, and new claims 12-14 are added.

The new IDS filed on 03/31/2008 has been considered and placed in the file. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL.**

Status of Claims

Accordingly, claims 1-14 are presented for examination on the merits for patentability.

Withdrawn Objection/rejection

(1) The previous rejection with respect to claims 1-11, under 35 U.S.C. § 112 second paragraph, is withdrawn in view of the amendment filed on 01/17/2008.

(2) The previous rejection with respect to claim 9-11, under 35 U.S.C. § 103(a), is withdrawn in view of the amendment filed on 01/17/2008. However, upon further consideration, the following new ground(s) of rejections are made.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

(1) Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrof et al. (U. S. Patent Application Publication No. 2004/0266626) in view of Becher et al. (U. S. Patent No. 6,908,882).

Applicant Claims

Applicants claim a water dispersible granule comprising an agricultural chemical compound, an adsorbent carrier, and a salt of N-acylamino acid, wherein said N-acyl group of the amino acid has 8 to 24 carbon atoms.

Determination of the scope and content of the prior art (MPEP 2141.01)

Schrof et al. teach a crop protection formulation in solid or dispersion form, which is able to disperse in an aqueous medium (page 2, paragraph 0015, line 1-3 and 7; page 9, paragraph 0100-0101). Schrof et al. also teach the dispersion of the crop protection formulation is dried to obtain the solid form of crop protection formulation (page 10, paragraph 0140, and line 1-4).

Schrof et al. teach that the crop protection agent consists of herbicides, pesticides and fungicides (page 2, paragraph 0015, and line 1-7). Schrof et al. also teach the preferred crop protection agent, i.e. benfuresate (page 4, paragraph 0061, left column: line 24), cyhalofop (page 4, paragraph 0061, right column: line 47), dimepiperate (page 5, paragraph 0061, left column: line 28), dimethametryn (page 5, paragraph 0061, left column: line 29), dithiopyr (page 5, paragraph 0061, left column: line 42), esprocarb (page 3, paragraph 0061, left column: line 51-52), pretilachlor (page 6, paragraph 0061, right column: line 12).

Schrof et al. teach that coated granules can be prepared by binding the solid crop protection formulation together with solid carriers (page 12, paragraph 0173, line 1-3), wherein

said solid carriers are mineral earths, i.e. silica, silicates, clay, diatomaceous earth (page 12, paragraph 0173, line 3-6).

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

Schrof et al. do not teach the solid crop formulation comprising N-acylamino acid. However, this deficiency is cured by the teaching of Becher et al.

Becher et al. teach a herbicidal composition having two surfactants, wherein the second surfactant is an anionic N-acyl derivative of an amino acid or a salt thereof (column 3, line 11-13). Becher et al. also teach that the composition can be a dry solid formulation, i.e. granule that is water-dispersible (column 7, line 51-54).

Becher et al. teach the second surfactant has a hydrophobic C_{8-24}-acyl moiety derived from a fatty acid (column 6, line 2-5), i.e. lauroyl, myristoyl, palmitoyl, linoleoyl, linolenoyl, stearoyl or oleoyl (column 6, line 15-16).

Becher et al. teach that the second surfactant is in the form of an acid or a salt having a low molecular weight cationic counter ion, wherein said cationic counter ion can be an alkali metal, i.e. sodium or potassium, an ammonium, or a C_{1-4} organic ammonium cation (column 6, line 23-28).

Becher et al. also teach the amino acid moiety of said N-acyl amino acid includes sarcosine (column 6, line 42), glutamic acid (column 6, line 48), alanine, aspartic acid, glycine, isoleucine, leucine and valine (column 6, line 59-61).

Becher et al. also teach that the herbicide composition can also contain one or more additional herbicidal active ingredients other than glyphosate (column 7, line 63-65).

Finding of prima facie obviousness Rational and Motivation (MPEP 2142-2143)

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teachings of Schrof et al. and Becher et al. and utilize an acylated amino acid or its derivatives as surfactant, i.e. N-acylated glycine or N-acylated sarcosine, together with an agricultural chemical compound and a carrier, to obtain the instantly claimed water dispersible granule.

One of ordinary skill would have been motivated to include a surfactant into the water dispersible granule, with a reasonable expectation of success because the presence of said anionic N-acylamino acid surfactant with the agricultural chemical compound, which has been dissolved in water, can help the retention and penetration of said agricultural chemical compound into the treated plants; thus enhances the herbicidal efficacy of the formulation, as suggested by Schrof et al. and Becher et al.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because the combined teachings of the prior art fairly suggests the instant claims.

The previous rejection with respect to claims 1-5 are rejected, under 35 U.S.C. 103(a) as being unpatentable over Schrof et al. (U. S. Patent Application Publication No. 2004/0266626) in view of Becher et al. (U. S. Patent 6,908,882), is maintained.

Response to Arguments

Applicants argue that Becher merely discloses the combination of an agricultural compound having a high melting point and the *N*-(C_{12-18} linear acyl) derivative of an a-amino acid. It is generally known that agricultural chemical compounds having a high melting point hardly cause interparticle aggregation during formulation or storage and do not require any emulsification process for formulation. Accordingly, herbicidal compositions containing an herbicidal compound having a high melting point can be prepared using a surfactant conventionally utilized for simply dispersing particles without encountering any problems in terms of disintegrability, dispersibility, or the like. In fact, Becher merely discloses the *N*-(C_{12-18} linear acyl) derivative of an a-amino acid as an adjuvant for enhancing the herbicidal activity of the glyphosate.

Applicants also argue that it is conventionally known that an agricultural chemical compound having a low melting point easily causes interparticle aggregation during formulation and storage, and therefore it is conventionally difficult to produce water dispersible granules having good disintegrability and dispersibility. In terms of the disintegrability and dispersibility of a formulation containing an agricultural chemical compound having a low melting point or softening point of 70°C or lower, the present specification demonstrates unpredictable effects of the combination of a salt of N-acylamino acid with the agricultural chemical compound having a low melting point or softening point *(see* examples and comparative examples in the present specification).

Applicants' argument filed on 01/17/2008 has been fully considered but they are not persuasive. The facts that high melting point agricultural chemical compounds hardly cause inter-particle aggregation during formulation or storage, or the fact that low melting point agricultural chemical compounds easily cause inter-particle aggregation is simply an assertion without any proof. In addition, the secondary reference, namely Becher et al., teach *N*-acyl derivative of amino acids, or a salt thereof, provide herbicidal activity that is synergistically greater than the effect provided by surfactants alone (see Becher et al. column 3, lines 10-18). The primary reference, namely Schrof et al., teach that agricultural chemical compounds, such as those instantly claimed, and glyphosate, are suitable herbicides to formulate into agricultural water-dispersible granule. Therefore, the combined teachings of the references would have been obvious to one ordinary skill in the art to add agents, such as the N-acyl-amino acids as taught by Becher et al., to enhance the herbicidal activity of glyphosate with other herbicides. Since the

instant claims use "comprising" language, and thus allows for the addition of other compound(s) in the composition.

From the teachings of the references, it is obvious that one of ordinary skill in the art would have had a reasonable expectation of success to arrive at the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

(2) Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrof et al. (U. S. Patent Application Publication No. 2004/0266626) in view of Becher et al. (U. S. Patent No. 6,908,882), and further in view of Ogawa et al. (U. S. Patent No. 5,945,114).

Applicant Claims

Applicants claim a water dispersible granule comprising an agricultural chemical compound, an adsorbent carrier, a salt of N-acylamino acid, and further comprises formaldehyde condensates of aromatic sulfonates or lignosulfonates, wherein the water dispersible granule contains 10-60 %, 10-80 %, 10-30 % and 5-25 % by mass of the agricultural chemical compound, the adsorbent carrier, the N-acylamino acid, and the formaldehyde condensates of aromatic sulfonates or lignosulfonates, respectively.

Determination of the scope and content of the prior art (MPEP 2141.01)

The teachings of Schrof et al. and Becher et al. have been set forth above. Essentially, Schrof et al. teach a solid crop formulation comprising a crop protection agent and a solid carrier (page 12, paragraph 0173, line 1-3), wherein said solid carrier can be mineral earths, i.e. silicas, silicates, clay and diatomaceous earth (page 12, paragraph 0173, line 3-6). Schrof et al. further teach surfactants, i.e. condensates of sulfonated naphthalene with formaldehyde (page 12, paragraph 0170, line 7-9), are suitable additives in the dispersion formulation.

Schrof et al. teach the dispersion of the crop protection formulation is dried to obtain the solid form of crop protection formulation (page 10, paragraph 0140, and line 1-4). Schrof et al. also teach that the concentration of the crop protection agent in said dispersion formation can be varied, preferably, from 0.01 to 95 % by weight (page 12, paragraph 0174, and line 1-5).

Becher et al. teach a water-dispersible herbicidal granule having two surfactants, wherein the second surfactant is an anionic N-acyl derivative of an amino acid or a salt thereof (column 3, line 11-13 and column 7, line 51-54).

Becher et al. further implicitly teach the second surfactant (N-acylamino acid) is present in the dry water-dispersible composition from about 0.1 % to 22 % by weight based on the weight ratio between the first surfactant and the second surfactant (N-acylamino acid) is about 1:5 to about 5:1 (column 14, claim 23), the weight ratio between the total surfactants and glyphosate acid is about 1:6 to about 1:2 (column 14, claim 25), and the weight of glyphosate

acid presents in said dry water-dispersible composition is about 5 % to about 80 % (column 6, claim 31).

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

The combined teachings of Schrof et al. and Becher et al. do not teach the concentrations of the carrier and anionic surfactant, i.e. formaldehyde condensates of aromatic sulfonates or lignosulfonates, present in the granule. However, this deficiency is cured by the teaching of Ogawa et al.

Ogawa et al. teach a water dispersible granule comprising a pesticide having a melting point not more than 70 °C, a carrier and a surface-active agent (column 1, line 47-50 and column 3, line 12-13).

Ogawa et al. teach that the carrier used in said water dispersible granule can be a mineral carrier, i.e. clay, diatomite or attapulgite (column 3, line 12-13), which is present in the amount between 0.1 to 85 % by weight based on the weight of the granule (column 3, line 14-17).

Ogawa et al. teach the surface active agent includes those can emulsify and disperse the pesticide. Example such as the anionic surfactant, i.e. sodium salt of naphthalenesulfonic acid/formalin condensate or lignosulfonates (column 2, line 27 and 30-31), which is present in 5 to 30 %, preferably 6 to 20 %, by weight based on the weight of said water dispersible granule (column 2, line 43-46).

Finding of prima facie obviousness Rational and Motivation
(MPEP 2142-2143)

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teachings of Schrof et al. and Becher et al. set forth above, and further to combine the teaching of Ogawa et al. to adjust the appropriated amount of mineral carrier and additional anionic surfactant that is necessary for obtaining the instantly claimed water dispersible granule.

One of ordinary skill would have been motivated to include a mineral carrier, i.e. silicas, clay, diatomaceous earth or attapulgite, and an additional anionic surfactant other than N-acyl amino acid, i.e. condensates of sulfonated naphthalene with formaldehyde or lignosulfonates, into the water dispersible granule, with a reasonable expectation of success because the presence of said mineral carrier and said anionic surfactant can help to formulate the water dispersible granule, that is normally difficult to make when containing an agricultural chemical compound which has a low melting or softening point. Thus, the mineral carrier and anionic surfactant increase the disintegration and suspensibility of said granule in water, as well as provide the storage stability for said water dispersible granule, as suggested by Schrof et al, Becher et al. and Ogawa et al.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because the combined teachings of the prior art fairly suggests the instant claims.

The previous rejection with respect to claims 6-8, under 35 U.S.C. 103(a) as being unpatentable over Schrof et al. (U. S. Patent Application Publication No. 2004/0266626) in view of Becher et al. (U. S. Patent 6,908,882), and further in view of Ogawa et al. (U. S. Patent No. 5,945,114), is maintained.

Response to Arguments

Applicants argue that Becher merely discloses the combination of an agricultural compound having a high melting point and the *N*-(C_{12-18} linear acyl) derivative of an a-amino acid. It is generally known that agricultural chemical compounds having a high melting point hardly cause interparticle aggregation during formulation or storage and do not require any emulsification process for formulation. Accordingly, herbicidal compositions containing an herbicidal compound having a high melting point can be prepared using a surfactant conventionally utilized for simply dispersing particles without encountering any problems in terms of disintegrability, dispersibility, or the like. In fact, Becher merely discloses the *N*-(C_{12-18} linear acyl) derivative of an a-amino acid as an adjuvant for enhancing the herbicidal activity of the glyphosate.

Applicants also argue that it is conventionally known that an agricultural chemical compound having a low melting point easily causes interparticle aggregation during formulation and storage, and therefore it is conventionally difficult to produce water dispersible granules having good disintegrability and dispersibility. In terms of the disintegrability and dispersibility

of a formulation containing an agricultural chemical compound having a low melting point or softening point of 70°C or lower, the present specification demonstrates unpredictable effects of the combination of a salt of N-acylamino acid with the agricultural chemical compound having a low melting point or softening point *(see* examples and comparative examples in the present specification).

Applicants' argument filed on 01/17/2008 has been fully considered but they are not persuasive. The facts that high melting point agricultural chemical compounds hardly cause inter-particle aggregation during formulation or storage, or the fact that low melting point agricultural chemical compounds easily cause inter-particle aggregation is simply an assertion without any proof. In addition, the secondary reference, namely Becher et al., teach *N*-acyl derivative of amino acids, or a salt thereof, provide herbicidal activity that is synergistically greater than the effect provided by surfactants alone (see Becher et al. column 3, lines 10-18). The primary reference, namely Schrof et al., teach that agricultural chemical compounds, such as those instantly claimed, and glyphosate, are suitable herbicides to formulate into agricultural water-dispersible granule. Therefore, the combined teachings of the references would have been obvious to one ordinary skill in the art to add agents, such as the N-acyl-amino acids as taught by Becher et al., to enhance the herbicidal activity of glyphosate with other herbicides. Since the instant claims use "comprising" language, and thus allows for the addition of other compound(s) in the composition.

From the teachings of the references, it is obvious that one of ordinary skill in the art would have had a reasonable expectation of success to arrive at the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art

at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

New Ground of Rejection

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrof et al. (U. S. Patent Application Publication No. 2004/0266626) in view of Becher et al. (U. S. Patent 6,908,882), and further in view of Alt, G. H. (U. S. Patent No. 4,600,433).

Applicant Claims

Applicants claim a water dispersible granule comprising an agricultural chemical compound, a salt of N-acylamino acid, and an adsorbent carrier. The granule further comprises N-acylmethyltaurate, wherein the N-acylmethyltaurate has 8 to 24 carbon atoms, and the ratio between the N-acylmethyltaurate and the total mass of said granule is 0.5 to 10 % by mass, and a dispersing agent, i.e. lignosulfonates.

Determination of the scope and content of the prior art (MPEP 2141.01)

The teachings of Schrof et al. and Becher et al. have been set forth above. Essentially, Schrof et al. teach a solid crop protection formulation in coated granule form, which is able to disperse in an aqueous medium (page 2, paragraph 0015, line 1-3 and 7; page 9, paragraph 0100-0101 and page 10, paragraph 0140, line 1-4). Schrof et al. also teach the formulation comprises a crop protection agent, as set forth above, and solid carriers (page 12, paragraph 0173, line 1-3).

Becher et al. teach a water-dispersible herbicidal granule having two surfactants, wherein the second surfactant is an anionic N-acyl derivative of an amino acids, or a salt thereof (column 3, line 11-13 and column 7, line 51-54).

Alt, G. H. teaches a herbicidal composition comprising an active ingredient with an adjuvant, i.e. a wetting agent to provide a composition in the form of finely divided particulate solids or granule (column 15, line 25-33).

Alt, G. H. specifically teach a wettable powder which contains 1 % by weight of sodium N-methyl-N-oleyl-taurate in the composition, which oleyl is known to have 18 carbon atoms (column 19, Table Part III: see Wettable Powders).

Alt, G. H. also teach that the composition preferably contains additional wetting agent in an amount sufficient to render the composition readily dispersible in water (column 15, line 36-40). Alt, G. H. teaches that the preferred dispersant, i.e. sodium lignin sulfonate, can be used (column 15, lines 55-56).

Ascertainment of the difference between the prior art and the claims (MPEP 2141.02)

The combined teachings of Schrof et al. and Becher et al. do not teach N-acylamino acid and N-acylmethyltaurate, as well as its amount present in the granule.

Finding of prima facie obviousness Rational and Motivation (MPEP 2142-2143)

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teachings of Schrof et al. and Becher et al. set forth above, and further to combine the teaching of Alt, G. H. and utilize N-acylmethyltaurate, as a wetting agent or as a surface-active agent, to obtain the instantly claimed water dispersible granule.

One of ordinary skill would have been motivated to include an adjuvant, i.e. a wetting agent or a surface-active agent, into the water dispersible granule, with a reasonable expectation of success because the presence of the wetting agents, i.e. sodium lignin sulfonate, N-acylamino acid surfactant or N-acylmethyltaurate, in sufficient amount would help the agricultural chemical compound be readily dispersible in water, and, at the same time, provide a better penetration of said agricultural chemical compound onto the treated plants. Thus greatly enhances the herbicidal efficacy of the formulation as suggested by Schrof et al. and Becher et al. and Alt, G. H.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because the combined teachings of the prior art fairly suggests the instant claims.

Conclusion

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication from the Examiner should direct to Helen Mei-Ping Chui whose telephone number is 571-272-9078. The examiner can normally be reached on Monday-Thursday (7:30 am – 5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either PRIVATE PAIR or PUBLIC PAIR. Status information for unpublished applications is available through PRIVATE PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the PRIVATE PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616